

A hydrogen purifying apparatus is provided for oxidizing and removing carbon monoxide (CO) in a reformed gas containing CO in addition to a main component of hydrogen gas. The apparatus has a reaction segment with a catalyst layer for oxidizing CO, a reformed gas supplying segment for supplying the reformed gas to the reaction segment via a reformed gas supply pathway, and an oxidant gas supplying segment for supplying an oxidant gas on the path of the reformed gas supply pathway. Preferably, the apparatus cools the catalyst layer at the upstream side and heats the catalyst layer at the downstream side.

Please amend several paragraphs of the DETAILED DESCRIPTION OF THE INVENTION section of the specification as identified and shown in clean form below. Also, please refer to the attached Marked-Up Version of the Specification where changes to the identified paragraphs are shown such that additions are shown by underlining and deletions are shown in brackets.

Please amend the paragraph under the heading "Embodiment 1-2" on page 17 to read as follows:

The hydrogen purifying apparatus of Embodiment 1-2 in accordance with the present invention will be described herein. As shown in FIG. 3, a hydrogen purifying apparatus in accordance with the present embodiment comprises a honeycomb catalyst layer 11 formed inside a tube-shaped reaction chamber 18, a reformed gas inlet 12, an air supply duct 13, an air flow rate control valve 14, a supply duct 15, a volume control valve 16, a reformed gas flow pathway formed external to the reaction chamber 18, a reformed gas outlet 19, and a heat exchange fin 20 provided on a wall of the reformed gas flow pathway neighboring the downstream side of the catalyst layer 11. The operation and effect of the apparatus of this embodiment are mostly similar to those of the apparatus of Embodiment 1-1. Therefore, the

description of this embodiment will be focused on different features from those of Embodiment 1-1.

Please amend the paragraph under "Embodiment 1-3" on page 19 to read as

follows:

-The hydrogen purifying apparatus of Embodiment 1-3 in accordance with the present invention will be described herein. As shown in FIG. 4, the hydrogen purifying apparatus in accordance with the present embodiment comprises a reformed gas inlet 22, an air supply duct 23, an air flow rate control valve 24, a supply duct 25, a volume control valve 26, a reaction chamber 28 formed on the periphery of a tube-shaped reformed gas flow pathway, a honeycomb catalyst layer 21 formed inside the reaction chamber 28, a reformed gas outlet 29, and a heat exchange fin 30 provided on a wall of the reformed gas flow pathway neighboring the downstream side of the catalyst layer 21. The operation and effect of the apparatus of this embodiment are mostly similar to those of the apparatus of Embodiment 1-2. Therefore, the description of this embodiment will be focused on different features from those of Embodiment

1-2.

Please amend the paragraph under "Embodiment 1-4" on page 20 to read as

follows:

-The hydrogen purifying apparatus of Embodiment 1-4 in accordance with the present invention will be described herein. As shown in FIG. 5, the hydrogen purifying apparatus in accordance with the present embodiment comprises a honeycomb first catalyst layer 31 formed inside a reaction chamber 40, a second catalyst layer 32 formed downstream from the first catalyst layer 31, a reformed gas inlet 33, an air supply duct 34, an air flow rate control valve 35, a supply duct 36, a volume control valve 37, a heat exchanger 38, a heater 39, and a

reformed gas outlet 41. The operation and effect of the apparatus of this embodiment are mostly similar to those of the apparatus of Embodiment 1. Therefore, the description of this embodiment will be focused on different features from those of Embodiment 1.

Please amend the paragraph under "Embodiment 1-5" on page 22 to read as follows:

The hydrogen purifying apparatus of Embodiment 1-5 in accordance with the present invention will be described herein. As shown in FIG. 7, the hydrogen purifying apparatus in accordance with the present embodiment comprises a honeycomb first catalyst layer 51, a second catalyst layer 52 formed downstream from the first catalyst layer 51 which are formed inside a reaction chamber 62, a reformed gas inlet 53, a first air supply duct 54, a first air flow rate control valve 56, a second air supply duct 55, and a second air flow rate control valve 57, wherein the second air supply duct 55 is provided between the first and second catalyst layers 51 and 52, a supply duct 58, a volume control valve 59, and a reformed gas outlet 63. The operation in effect of the apparatus of this embodiment are mostly similar to those of the apparatus of Embodiment 1. Therefore, the description of this embodiment will be focused on different features from those of Embodiment 1.

**In the Claims:**

Please cancel claims 12-17, 19-20 and 22 without prejudice to the filing of a divisional application directed to the subject matter thereof.

Please amend claims 1, 3-4, 6, 8-10, 21 and 23-26 as shown in the attached marked-up version of the claims in which additions are shown by underlining and deletions shown by bracketing to read as follows: